Scope of Work Defender's Lodge IT Cabling

(Revised - 5 Dec 2013)

Defender's Lodge is a new two story construction and VA is responsible to provide the following cabling needs for the telecom contractors. To provide an overview, about 200 pair of copper wiring was, originally, to be brought in the building; however, due to unforeseen circumstances regarding the path of the cabling, copper can no longer be brought in. The current cabling configuration inside the actual building was done to follow copper and now needs to be resolved to follow current Voice over IP VA standards which will be attached with this scope of work document.

Telephone services will be Voice over IP (VoIP) in office spaces and for the 52 patient/lodging rooms. Note the specifics for the Patient Phone cabling and Patient Wireless cabling.

IT Closet Work

- Install 2 VA provided relay rack into the IT closet, leaving 36 inches of clearance on 3 sides of the rack. If 36 inches cannot be provided, as long as there is 36 inches behind the rack and space to walk behind the rack, this will be sufficient.
- If existing cable does not have sufficient slack to be moved and re-terminated onto the provided rack, it is acceptable to add an in-room tie cable between the existing 110 block in the IT closet, and a 110 block provided and installed by you that is closer to the VA relay rack. This tie cable can be brought over on cable ladder.
- Provide and install cable ladder from the wall to the cabinet to provide support and a pathway for horizontal cabling under 2.2.4 "Horizontal Cabling" in the VA Codes of Practice. Add raceway for vertical cable management to both relay racks. If needed, contractor shall provide and install fire rated plywood on walls in order to 3-point anchor equipment racks.
- Install earth ground bus bar (please see VA Codes of Practice below for requirements).
- Ground rack with wire 6 from bus bar (please see VA Codes of Practice below for requirements).

- Re-terminate VA cabling and patch panels from the wall to the rack. Test and provide test results for all cabling after termination to ensure continuity and integrity of the cables.
- Re-terminate and re-dress 110 block hardware. It is currently vertical and need to be re-terminated horizontally.
- Convert all current voice jacks, approximately 79, throughout the building into VA data jacks and re-terminate on the patch panel that shall be moved and installed on the rack. Label all jacks according to VA naming convention (please see VA Codes of Practice below for requirements). If existing voice cables to not reach, new Ethernet CAT6 cables should be installed as a replacement.
- Decommission existing patch panel and fiber patch panel on the provided rack. Provide and install new fiber patch panel at the top of the relay rack.
- Terminate existing fiber cable onto the provided relay racks. All fiber should ultimately terminate in bldg 100 room FB-370. However you may be able to pick up from one of our fiber distributions in Bldg 7 A-129; you can survey to see if there are available spares with no jumpers on them. In the Defenders Lodge IT closet, the fiber should terminate on a fiber tray mounted onto the rack, in accordance to the VAPAHCS Codes of Practice, contractor should also provide SM fiber jumpers in 3 meter length to serve as the connection in the Defender's Lodge BDF (IT closet), Bldg 6 BDF and Bldg 101 FB-370.
- Provide and install horizontal cable management rings between patch panels and vertical cable management rings between the relay racks.
- All cabling shall be done according to the VAPAHCS Codes of Practice (see below).

VoIP Patient Phones

- Convert 2 (CAT6) voice cables to data where the bedside nightstands and desks are located in the 52 patient/guest rooms, and these cables shall be punched down on a patch panel on the VA rack. If cable is too short, a new Ethernet CAT6 cable should be installed as a replacement. Label all jacks according to VA naming convention and terminate on the closet patch panel installed on the VA relay rack. Test and provide test results for all cabling after termination.
- Re-label all cabling according to current room numbers both at the patch
 panel and on the face plate in each room. Jacks shall have appropriate clear
 label covers along with the clear label covers on the patch panels. Depending
 on the brand used, the suitable labels shall follow (i.e. Panduit Patch Panels

can use Patch Panel PanTher LS8E Labels). Labels shall not be easily smeared, but protected with the clear covers. Cables should be terminated in room numerical order on to the patch panel to avoid confusion, no jumping.

Patient Wireless Connection

- Provide and install wall cabinet with locking capability to accommodate
 Patient Guest Network cabling, and re-terminate inside of the wall cabinet.
 Dimensions of the cabinet are: W 19"/D 21-1/2"/H 30-1/2"; internal
 dimensions are: W 19"/D 20"/H 26-1/4". Key to this cabinet should be given to
 the Office of Information & Technology Telecom department.
- Label the patient guest jack located
- Provide 1 jack with 1 data port in the patient room dedicated for patient wireless, at the desk area.
- Patient Wireless data drops shall be terminated in the network air-gapped wall cabinet.

END OF SCOPE OF WORK